IN THE SPECIFICATION

Please replace paragraph [0051] beginning at page 23 with the following rewritten paragraph:

[0051]

In the present embodiment, the radial vane 1 is manufactured rapidly from the bristle bundle 4 in this manner. Specifically, opening and fixing of the ~~yarn~~ bristle bundle 4, cutting of the outer diameter, annular welding of the center part, and cutting of the inside of the weld portion are performed continuously at a fixed position. In particular, opening of the bristle bundle 4, annular welding of the center part, and removing of the inside of the weld portion are performed simultaneously by the welding head 5. Therefore, the radial vane 1 is manufactured with high efficiency from the ~~yarn~~ bristle bundle 4.

Please replace paragraph [0052] beginning at page 24 with the following rewritten paragraph:

[0052]

The radial vane 1 manufactured on the processing bed 6 is separated from the ~~yarn~~ bristle bundle 4 when the inside of the weld portion 2 is removed. The tip portion of the remaining ~~yarn~~ bristle bundle 4 is adhered excessively by welding. When the welding head 5 and the bristle presser 9 are lifted to the original positions, the bristle bundle 4 is pushed up by 2 mm, for example, by another bristle push-up chuck 8 as shown in Fig. 5, and the excess weld portion 12 of the tip is removed by a cutter 11 in a horizontal direction. Thus, the tip portion of the bristle bundle 4 is separated, and manufacturing of the next radial vane is prepared. The excess weld portion 12, which has been cut, is sucked by an air blow 13 provided on a side. When the welding head 5 and the bristle presser 9 are lifted to the

original positions, the radial vane 1 manufactured is also released and sucked by the air blow 13.

Please replace paragraph [0053] beginning at page 24 with the following rewritten paragraph:

[0053]

By repeating this procedure, the radial vanes 1 are manufactured continuously from the ~~yarn~~ bristle bundles 4 with high efficiency. The radial vanes 1 manufactured are assembled into a 360-degree toothbrush in the following manner.

Please replace paragraph [0062] beginning at page 28 with the following rewritten paragraph:

[0062]

In manufacturing the radial vane 1, supplying of the bristle bundle 4 to opening to a radial shape, fixing, welding of the center part, removal of the inside of the weld portion, and removal of the excess weld portion 12 of the ~~yarn~~ bristle bundle 4 are performed continuously at a fixed position. In particular, opening of the bristle bundle 4, welding of the center part, and removal of the inside of the weld portion are performed by the welding head 5 with one tool and in one step. Therefore, the productivity of the radial vane 1 is improved and the manufacturing apparatus is inexpensive, so it is possible to reduce the manufacturing cost of the radial vane 1 substantially.

Please replace paragraph [0089] beginning at page 38 with the following rewritten paragraph:

[0089]

In operation, the radial vane 1 is manufactured from the ~~yarn~~ bristle bundle 4 at the vane manufacturing position. The manufacturing method is substantially same as the method described above. After the ~~yarn~~ bristle bundle 4 is exposed on the processing bed 6 by a predetermined length by the lifting chuck 28, the welding head 5 is lowered and the radial vane 1 with a boss is manufactured on the processing bed 6. When the radial vane 1 is manufactured on the processing bed 6 at the vane manufacturing position, the ~~yarn~~ bristle bundle 4 penetrating the rotary table 25 and the processing bed 6 are drawn downward to a descending point shown by 4B. Then, the rotary table 25 rotates until the processing bed 6 moves to the vane laminating position. At this time, the manufactured radial vane 1 is kept on the processing bed 6, and the boss part (annular protrusion 3) formed on the lower face of the weld portion 2 contributes to fixing of positioning of the radial vane 1 and improvement in stability.